

U.S. Patent Application Serial No. **10/594,546**
Response filed March 23, 2009
Reply to OA dated June 23, 2009

REMARKS

Claims 1, 4-9, and 12-16 are currently being examined in this application, and stand rejected. Claim 1 is an independent claim in this pending application, with the remaining claims each ultimately depending from claim 1. Claims 2-3 and 10-11 were previously canceled. The applicants respectfully submit that no new matter has been added, and it is believed that these remarks are fully responsive to the Office Action dated **March 23, 2009**.

The applicants make of record the interview held with Examiner Therkorn on June 15, 2009 at the United States Patent & Trademark Office. During the interview, the applicants discussed whether Vidalinc was a proper reference, in that the present application has a priority date earlier than that of Vidalinc. Also, the flush aspect of the present claims as related to the Cook and Price references, as well as the sieve and ring structure of Jaworek, were discussed. No agreement on these issues was reached during the interview.

The Office Action rejects claims 1, 4-9, and 12-16 under 35 U.S.C. § 103(a) as being unpatentable over Price (U.S. Patent No. 5,439,593) or Cook et al. (U.S. Patent No. 6,761,855), in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Pub. No. 2006/0118471). The applicants will address each of these references below.

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At the outset, the applicants traverse the use of the Vidalinc reference, as it is not prior art to this application. The priority date of Vidalinc is, at the earliest, November 4, 2004. However, the present application, being based on PCT/JP05/05324, has a priority date of March 31, 2004. As such, Vidalinc is not a properly considered prior art in this case.

Further, it is also noted that priority has not been acknowledged in the mailed Office Actions. As such, the applicants hereby request that priority be acknowledged.

Moving on to the combination of Price or Cook with Jaworek, the applicants traverse the above rejection due to deficiencies in these references, both singularly and in combination.

During the Interview, the Examiner stated that because Price disclosed an abutting step portion supporting a stopper part holding an outflow side frit (as shown in Fig. 2 of Price), and that Jaworek disclosed the inserted cartridge being substantially flush and the outflow side frit being at the lower side of the cartridge body (as shown in Figs. 1-3 of Jaworek), a person of ordinary skill could have been able to form the structure of claim 1 from these two disclosures.

However, upon review of these disclosures in light of the present specification, the applicants disagree.

Price does not disclose “the inner surface of the cartridge body located below is continued to the inner surface of the cartridge body located above so as to be substantially flush over the stopper part in the fitted state of the two cartridge bodies.” Instead, Price shows its stopper part holding the outflow side frit against an abutting part, but not at the lower side of the cartridge body. This stopper part is located in the middle of the cartridge, as shown Figs. 1 and 2, above the tapered sealing surface 13. Further, the inner surface of the cartridge above is not substantially flush with that of the cartridge below.

Cook does not have an abutting step part. Instead, its structure holds the other inserted cartridge in place by being fitted, without any support from underneath (See, e.g., Fig. 3 of Cook and how this differs from Fig. 1 of the present application).

Jaworek holds its inserted cartridges by use of a threaded screw portion, instead of an abutting step. Further, while its structure has an outflow side frit at its lower end, it is not held by the stopper part, but instead by its inner and outer rings.

The U.S. Supreme Court has stated, “[a] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.” *KSR v. Teleflex*, 550 U.S. 398, 416 (2007). Under *KSR*, a combination of known elements is patentable when their combination yields something more than what was expected from their

individual uses in the prior art. *Id.* Thus, even assuming that the individual elements of claim 1 were known in the prior art from reading Price with Jaworek, the applicants assert that (1) claim 1 yields more than what was expected from the elements of these two references in combination, and (2) that these references fail to teach a necessary feature of claim 1.

Even if Price teaches the benefit of supporting an outflow side frit with the stopper against the abutting step part, Price shows that the stopper must be formed as protrude into the opening to (and not of) the lower side, such that the inner surfaces are not substantially flush. This protrusion, extending far beyond the inner surface, is likely to be considered necessary by a person of ordinary skill to adequately support the frit.

As such, the references do not show that a stopper part, alone, can be sufficiently formed to support an outflow side frit, such to make the inner surfaces of inserted cartridges be substantially flush.

Even assuming the Office Action is correct in alleging that Jaworek shows the inner surfaces of the inserted cartridges being substantially flush, this structure in Jaworek requires that the outflow side frit to be supported by inner and outer rings instead of a stopper part. The disclosure does not teach, or suggest, any the structure obtaining substantially flush inner surfaces by holding the outflow side frit by a stopper part as in claim 1.

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Thus, even assuming for argument's sake that a person of ordinary skill would have obviously seen that forming a cartridge with substantially flush inner surfaces, like Jaworek, would have improved the function of Price, these disclosures would not have given the information necessary to achieve the desired result. At the very least, the person of ordinary skill would have needed to develop an understanding a technique of enlarging the opening in the diameter of the stopper to make the inner surfaces substantially flush, while providing sufficient support for the outflow side frit without use of rings. This enlargement of the opening in Price, in combination with removal of the tapered sealing surface 13, while maintaining the proper support of the frit without rings (as used in Jaworek) is not known in the art or rendered obvious by the cited references.

In light of these remarks, claims 1, 4-9, and 12-16 are believed to be patentable and in condition for allowance. Withdrawal of the rejection of these claims under 35 U.S.C. § 103(a) is now in order and respectfully solicited.

The Office Action rejects claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over either Price (U.S. Patent No. 5439,593) or Cook et al. (U.S. Patent No. 6,761,855), in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Pub. No. 2006/0118471), and in further view of either August et al. (U.S. Patent No. 6,530,288) or Serenko et al. (U.S. Patent No. 5,989,424). However, because these secondary references fail to disclose the elements of claim 1, as

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discussed above in reference to the Price, Cook, and Jaworek references, and the Vidalinc reference not being proper prior art, the cited combination of references does not render claims 5 and 6 obvious.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over either Price (U.S. Patent No. 5,439,593) or Cook et al. (U.S. Patent No. 6,761,855), in view of either Jaworek (U.S. Patent No. 3,763,879) or Vidalinc (U.S. Patent Pub. No. 2006/0118471), in view of either August et al. or Serenko et al. in further view of Muller et al. et al. (U.S. Patent No. 4,732,687) and Radnoti (U.S. Patent No. 4,055,498). Because these secondary references fail to disclose the elements of claim 1, as discussed above in reference to the Price, Cook, and Jaworek references, and the Vidalinc reference not being proper prior art, the cited combination of references does not render claim 6 obvious.

As such, claims 5 and 6 are believed to be patentable and now in condition for allowance. Withdrawal of the rejections of claims 5 and 6 under 35 U.S.C. § 103(a) is now in order and respectfully solicited.

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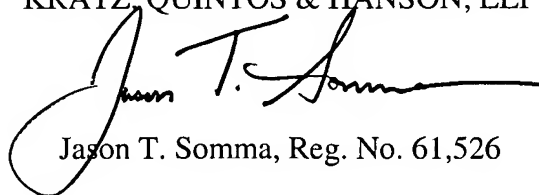
In view of the preceding remarks, claims 1, 4-9, and 12-16 are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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